

June 25, 2008

Charles L.A. Terreni Chief Clerk and Administrator South Carolina Public Service Commission Post Office Drawer 11649 Columbia, South Carolina 29211

Re:

Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc.

Power Plant Performance Report (May 2008)

Docket No. 2006-224-E

Dear Mr. Terreni:

Enclosed is the Power Plant Performance Report for Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc. for the month of May 2008.

Sincerely,

Zen S. Anthony, General Counsel

Progress Energy Carolinas, Inc.

LSA/dhs Enclosures 45612

John Flitter (ORS) c:

The following units had no off-line outages during the month of May:

Brunswick Unit 1 Brunswick Unit 2 Harris Unit 1 Robinson Unit 2 Mayo Unit 1

Full Scheduled Outage

- A. <u>Duration:</u> The unit was taken out of service at 3:10 on May 24, and returned to service at 12:00 on May 26, a duration of 56 hours and 50 minutes.
- B. Cause: Air Heater Wash
- C. <u>Explanation</u>: The unit was taken offline to wash the air heater.
- D. <u>Corrective Action:</u> Upon completion of the air heater wash, the unit remained off-line due to a voltage regulator problem.

Full Forced Outage

- A. <u>Duration</u>: Upon completion of planned air heater wash, the unit remained offline from 12:00 to 17:05 on May 26, a duration of 5 hours and 5 minutes.
- B. Cause: Generator Voltage Regulator
- C. <u>Explanation</u>: The unit was forced to remain offline following the air heater wash due to an issue with the generator voltage regulator.
- D. <u>Corrective Action:</u> Maintenance activities and adjustments were made to correct the problem with the generator voltage regulator, and the unit was returned to service.

Full Scheduled Outage

- A. <u>Duration:</u> The unit was taken out of service at 1:16 on April 19, and returned to service at 12:13 on May 6, a duration of 418 hours and 57 minutes. The unit was offline for 132 hours and 13 minutes during the month of May.
- B. Cause: Boiler Inspection and Installation of Environmental Modifications
- C. <u>Explanation</u>: The unit was taken out of service for a planned boiler inspection, other inspections, and maintenance. Additionally, the installation of the flue gas desulfurization system was completed.
- D. <u>Corrective Action:</u> Planned outage activities, including boiler inspection, periodic, preventative, and corrective maintenance, were completed. Installation of the flue gas desulfurization system was also completed. Following the completion of planned outage activities, the unit was returned to service.

Roxboro Unit 4

Full Scheduled Outage

- A. <u>Duration:</u> The unit was taken out of service at 0:00 on May 16, and returned to service at 19:00 on May 17, a duration of 43 hours.
- B. Cause: Inspection of Flue Gas Desulfurization System
- C. <u>Explanation</u>: The unit was taken out of service to conduct inspections of the flue gas desulfurization system components.
- D. <u>Corrective Action:</u> Upon completion of the flue gas desulfurization system inspection, the unit was returned to service.

	Month of N	May 2008	Twelve Month	Summary	See Notes*
MDC	938	MW	938	MW	1
Period Hours	744	HOURS	8,784	HOURS	
Net Generation	704,958	MWH	6,896,625	MWH	2
Capacity Factor	101.02	%	83.70	%	
Equivalent Availability	98.63	%	82.48	%	
Output Factor	101.02	%	100.12	%	
Heat Rate	10,346	BTU/KWH	10,390	BTU/KWH	
	MWH 	% of Possible	MWH 	% of Possible	
Full Scheduled	0	0.00	1,351,299	16.40	3
Partial Scheduled	9,556	1.37	76,298	0.93	4
Full Forced	0	0.00	0	0.00	5
Partial Forced	0	0.00	45,719	0.55	6
Economic Dispatch	0	0.00	31	0.00	7
Possible MWH	697,872		8,239,392		8

^{*} See 'Notes for Nuclear Units' filed with the January 2008 report.

^{**} Gross of Power Agency

	Month of N	May 2008	Twelve Month	Summary	See Notes*
MDC	937	MW	937	MW	1
Period Hours	744	HOURS	8,784	HOURS	
Net Generation	697,370	MWH	8,191,045	MWH	2
Capacity Factor	100.03	%	99.52	%	
Equivalent Availability	99.98	%	98.63	%	
Output Factor	100.03	%	100.01	%	
Heat Rate	10,590	BTU/KWH	10,552	BTU/KWH	
	MWH 	% of Possible	MWH 	% of Possible	
Full Scheduled	0	0.00	0	0.00	3
Partial Scheduled	141	0.02	45,461	0.55	4
Full Forced	0	0.00	40,135	0.49	5
Partial Forced	0	0.00	28,258	0.34	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	697,128		8,230,608		8

^{*} See 'Notes for Nuclear Units' filed with the January 2008 report.

^{**} Gross of Power Agency

	Month of N	Лау 2008 	Twelve Month	Summary	See Notes*
MDC	900	MW	900	MW	1
Period Hours	744	HOURS	8,784	HOURS	
Net Generation	679,592	MWH	7,422,272	MWH	2
Capacity Factor	101.49	%	93.89	%	
Equivalent Availability	100.00	%	92.95	%	
Output Factor	101.49	%	100.56	%	
Heat Rate	10,833	BTU/KWH	10,846	BTU/KWH	
	MWH 	% of Possible	MWH 	% of Possible	
Full Scheduled	0	0.00	523,410	6.62	3
Partial Scheduled	0	0.00	8,585	0.11	4
Full Forced	0	0.00	1,320	0.02	5
Partial Forced	0	0.00	66,157	0.84	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	669,600		7,905,600		8

^{*} See 'Notes for Nuclear Units' filed with the January 2008 report.

^{**} Gross of Power Agency

Progress Ene	ergy Carolinas
Run Date	6/16/2008

BASE LOAD POWER PLANT PERFORMANCE REPORT Robinson 2

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	Month of N	Лау 2008 	Twelve Month	Summary	See Notes*
MDC	710	MW	710	MW	1
Period Hours	744	HOURS	8,784	HOURS	
Net Generation	554,155	MWH	6,511,535	MWH	2
Capacity Factor	104.91	%	104.41	%	
Equivalent Availability	100.00	%	99.61	%	
Output Factor	104.91	%	104.41	%	
Heat Rate	10,703	BTU/KWH	10,720	BTU/KWH	
	MWH 	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	0	0.00	3
Partial Scheduled	0	0.00	9,851	0.16	4
Full Forced	0	0.00	0	0.00	5
Partial Forced	0	0.00	14,195	0.23	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	528,240		6,236,640		8

^{*} See 'Notes for Nuclear Units' filed with the January 2008 report.

	Month of N	May 2008	Twelve Month Summary		See Notes*
MDC	742	MW	741	MW	1
Period Hours	744	HOURS	8,784	HOURS	
Net Generation	231,342	MWH	4,541,542	MWH	2
Capacity Factor	41.91	%	69.68	%	
Equivalent Availability	100.00	%	96.33	%	
Output Factor	41.91	%	70.91	%	
Heat Rate	11,578	BTU/KWH	10,489	BTU/KWH	
	MWH 	% of Possible	MWH 	% of Possible	
Full Scheduled	0	0.00	36,976	0.57	3
Partial Scheduled	0	0.00	121,167	1.86	4
Full Forced	0	0.00	32,908	0.51	5
Partial Forced	0	0.00	48,013	0.74	6
Economic Dispatch	320,706	58.09	1,731,985	26.59	7
Possible MWH	552,048		6,512,604		8

^{*} See 'Notes for Fossil Units' filed with the January 2008 report.

^{**} Gross of Power Agency

Progress Ene	ergy Carolinas
Run Date	6/16/2008

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	Month of May 2008		Twelve Month	See Notes*	
MDC	671	MW	652	MW	1
Period Hours	744	HOURS	8,784	HOURS	
Net Generation	343,825	MWH	5,045,644	MWH	2
Capacity Factor	68.87	%	88.06	%	
Equivalent Availability	91.09	%	95.26	%	
Output Factor	78.18	%	92.18	%	
Heat Rate	9,298	BTU/KWH	9,098	BTU/KWH	
	MWH 	% of Possible	MWH 	% of Possible	
Full Scheduled	38,135	7.64	161,230	2.81	3
Partial Scheduled	0	0.00	18,301	0.32	4
Full Forced	3,411	0.68	78,482	1.37	5
Partial Forced	2,954	0.59	14,485	0.25	6
Economic Dispatch	110,900	22.21	424,047	7.40	7
Possible MWH	499,224		5,730,096		8

^{*} See 'Notes for Fossil Units' filed with the January 2008 report.

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	Month of N	Лау 2008 	Twelve Month	Summary	See Notes*
MDC	705	MW	705	MW	1
Period Hours	744	HOURS	8,784	HOURS	
Net Generation	278,735	MWH	4,263,638	MWH	2
Capacity Factor	53.14	%	68.85	%	
Equivalent Availability	82.20	%	89.85	%	
Output Factor	64.63	%	74.31	%	
Heat Rate	11,582	BTU/KWH	11,149	BTU/KWH	
	MWH 	% of Possible	MWH 	% of Possible	
Full Scheduled	93,213	17.77	425,233	6.87	3
Partial Scheduled	0	0.00	101,220	1.63	4
Full Forced	0	0.00	4,394	0.07	5
Partial Forced	150	0.03	97,695	1.58	6
Economic Dispatch	152,422	29.06	1,300,540	21.00	7
Possible MWH	524,520		6,192,720		8

^{*} See 'Notes for Fossil Units' filed with the January 2008 report.

	Month of N	Мау 2008 	Twelve Month	Summary	See Notes*
MDC	698	MW	698	MW	1
Period Hours	744	HOURS	8,784	HOURS	
Net Generation	263,942	MWH	3,740,566	MWH	2
Capacity Factor	50.83	%	61.01	%	
Equivalent Availability	93.80	%	83.36	%	
Output Factor	61.37	%	71.24	%	
Heat Rate	10,938	BTU/KWH	10,570	BTU/KWH	
	MWH 	% of Possible	MWH 	% of Possible	
Full Scheduled	30,014	5.78	795,719	12.98	3
Partial Scheduled	0	0.00	137,398	2.24	4
Full Forced	0	0.00	21,813	0.36	5
Partial Forced	2,188	0.42	65,559	1.07	6
Economic Dispatch	223,168	42.97	1,367,906	22.31	7
Possible MWH	519,312		6,131,232		8

^{*} See 'Notes for Fossil Units' filed with the January 2008 report.

^{**} Gross of Power Agency

Plant	Unit	Current MW Rating	January 2007 - December 2007	May 2008	January 2008 - May 2008
Asheville	1	191	63.64	67.46	79.65
Asheville	2	185	73.17	18.47	63.34
Cape Fear	5	144	78.67	50.65	70.44
Cape Fear	6	172	72.38	58.03	57.25
Lee	1	74	62.15	59.96	63.98
Lee	2	77	62.47	23.87	46.50
Lee	3	248	66.38	62.58	27.14
Mayo	1	742	72.10	41.91	60.54
Robinson	1	176	74.63	0.00	62.48
Roxboro	1	369	78.01	74.86	81.48
Roxboro	2	671	80.06	68.87	83.40
Roxboro	3	705	74.37	53.14	61.29
Roxboro	4	698	62.40	50.83	67.74
Sutton	1	93	56.26	18.66	48.58
Sutton	2	102	63.19	13.02	60.47
Sutton	3	403	55.53	55.74	63.64
Weatherspoon	1	48	53.86	19.94	45.54
Weatherspoon	2	49	55.68	21.91	44.06
Weatherspoon	3	76	68.70	15.20	63.02
Fossil System Total		5,223	69.82	50.14	65.07
Brunswick	1	938	95.92	101.02	69.06
Brunswick	2	937	86.99	100.03	98.90
Harris	1	900	93.90	101.49	102.40
Robinson Nuclear	2	710	92.26	104.91	105.84
Nuclear System Total		3,485	92.25	101.67	93.19
Total System		8,708	78.79	70.76	76.32

Amended SC Fuel Rule Related to Nuclear Operations

There shall be a rebuttable presumption that an electrical utility made every reasonable effort to minimize cost associated with the operation of its nuclear generation system if the utility achieved a net capacity factor of \geq 92.5% during the 12 month period under review. For the test period April 1, 2008 through May 31, 2008, actual period to date performance is summarized below:

Period to Date: April 1, 2008 to May 31, 2008

Nuclear System Capacity Factor Calculation (Based on net generation)

A Nuclear system actual generation for SCPSC test period	A = 4,522,044 MWH			
B. Total number of hours during SCPSC test period	B =	1,464 hours		
C. Nuclear system MDC during SCPSC test period (see page 2)	C =	3,485 MW		
D. Reasonable nuclear system reductions (see page 2)	D =	681,186 MWH		

A. SC Fuel Case nuclear system capacity factor: [(A + D) / (B + C)] * 100 = 102.0%

NOTE:

If Line Item E > 92.5%, presumption of utility's minimum cost of operation. If Line Item E < 92.5%, utility has burden of proof of reasonable operations.

Amended SC Fuel Rule Nuclear System Capacity Factor Calculation Reasonable Nuclear System Reductions

Period to Date: <u>April 1, 2008</u> to <u>May 31, 2008</u>

Nuclear Unit Name and Designation	BNP Unit # 1	BNP Unit # 2	HNP Unit # 1	RNP Unit # 2	Nuclear System
Unit MDC	938 MW	937 MW	900 MW	710 MW	3,485 MW
Reasonable refueling otuage time (MWH)	644,015	0	0	0	
Reasonable maintenance, repair, and equipment replacement outage time (MWH)	117	519	0	0	
Reasonable coast down power reductions (MWH)	0	0	0	0	
Reasonable power ascension power reductions (MWH)	30,893	0	0	0	
Prudent NRC required testing outages (MWH)	0	5,642	0	0	
SCPSC identified outages not directly under utility control (MWH)	0	0	0	0	
Acts of Nature reductions (MWH)	0	0	0	0	
Reasonable nuclear reduction due to low system load (MWH)	0	0	0	0	
Unit total excluded MWH	675,025	6,161	0	0	
Total reasonable outage time exclusions [carry to Page 1, Line D]					681,186